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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,336	11/08/2001	Chun-Wei Lin	LIN=176	5199

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EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,336

Applicant(s)

LIN, CHUN-WEI

Examiner

Lynda M Salvatore

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-27 and 30 is/are allowed.
- 6) ☒ Claim(s) 28-29, and 31-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1771

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and accompanying remarks, Paper No. 4, have been carefully considered and entered. Claims 1-20 have been cancelled and new claims 21-34 have been added as requested. The cancellation of claims 1-20 renders moot the election, claim objections and the paragraph 112 2nd rejections as well as the prior art rejections set forth in sections 1-15 of the last Office Action. However, upon further consideration a new grounds rejection is set forth herein below.

Claim Objections

2. Claims 21 and 28 are objected to because of the following informalities: Part b on line 4 of said claims, recites a "hack" surface. The Examiner assumes that the Applicant meant to recite "back" surface instead. Additionally, these claims also recite "adapted to" limitations as set forth in section 12 of the last Office Action. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 28-29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes, US 2003/0027474 A1 in view of Nakashima et al., US 3,981,958.

The published patent application to Hayes discloses a laminated fabric composite suitable for use in the manufacture of automobile air bags (Abstract). The composite consists essentially of a fabric layer having a viscosity increasing coating compound such as alkyl amine, an adhesive layer, a polymeric film layer and a release coating (Section 0058, 0038 and 0065). The polymeric film layer may include styrene-butadiene-styrene block co-polymer (Section 0038). The release coating layer in this case is considered analogous to the protective coating of the instant invention and is formed from a silicone polyurethane co-polymer (Section 0065). Hayes also teaches that colorants, dyes, and viscosity control agents may be further added to the fabric, the viscosifier, the adhesive, or the polymeric film (Section 0055).

Hayes fails to teach a surface treating agent containing a styrenic block co-polymer material wax and toluene, however the patent issued to Nakashima et al., teaches a graft co-polymer composition comprising ethylene/propylene/non-conjugated diene terpolymer backbone co-polymerized with methacrylic ester graft moiety which is suitable for use as coating agents, topcoating, subcoating, surface treating agents and sealing agents (Abstract and Column 8, 35-40). Nakashima et al., further teaches that the graft co-polymer is especially well suited for those non-polar high molecular materials that are difficult to paint or coat such as styrene/butadiene co-polymer (Column 8, 50-55). Nakashima et al., co-polymerizing the lower alkyl methacrylate ester with ethylenically saturated monomer such as styrene (Column 4, 45-55). Processed oil such as paraffin, is also added as a plasticizer (Column 6, 30-35). Suitable solvent materials include organic aromatic hydrocarbons such as toluene (Column 3, 46-50). Additionally, Nakashima et al., teaches improving the impact resistance of various resins such as

Art Unit: 1771

styrene/acrylonitrile co-polymer by incorporating them into the graft co-polymer composition (Column 12, 1-5). Depending on intended use, Nakashima et al., further teaches incorporating various additives such as coloring agents, dyes or pigments to the graft co-polymer composition (Column 8, 15-22). Furthermore, in the past, Nakashima et al., also discloses that fibrous materials were often rendered waterproof with a surface treatment of a resin dissolved in organic solvents. The resin, which was dissolved in organic solvent, generally consisted of a wax such as paraffin and a hydrophobic polymer such as styrene butadiene co-polymer (Column 11, 20-30). Though, Nakashima et al., teaches that this composition is not particularly preferred for reasons such as poor flexibility and durability, it is the position of the Examiner that the disclosure must be relied upon to further illustrate that such surface treating compositions are known in the art.

Therefore, motivated by the desire to provide a surface coating having good adhesion, impact resistance and durability properties it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the styrene-butadiene-styrene block co-polymer film or the release layer of Hayes with the graft co-polymer composition of Nakashima et al.

Allowable Subject Matter

5. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the prior art fails to teach the claimed materials used for the viscosity layer or a modified styrene block co-polymer surface

Art Unit: 1771

protective layer and presently there is no motivation to combine references to form an obvious type rejection.

6 Claims 21-27 and are found allowable over the prior art of record. Specifically, the prior art fails to teach or suggest a surface-treating agent comprising silicone, isophthalic acid, tetraisopropyl titanate, toluene, and wax. An updated art search did not produce any new substantial art for which to base a rejection on and presently there is no motivation to combine references to form an obvious type rejection.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.


Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

September 9, 2003

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TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700